

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
P

٢	APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO. 4095		
_	10/603,823	06/26/2003		Satoshi Takenaka	105012.01			
	25944	7590 12/0	3/2003		EXAMINER			
	OLIFF & B	ERRIDGE, PLC			LEE, HSI	EN MING		
	P.O. BOX 19	928						
	ALEXANDRIA, VA 22320				ART UNIT	PAPER NUMBER		
					2823			

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	A	pplicant(s)						
	10/603,823	T	AKENAKA, SATO	OSHI					
Office Action Summary	Examiner	A	rt Unit						
	Hsien-Ming Lee		323						
The MAILING DATE of this communication ap Period for Reply	pears on the cover she	et with the corr	espondence ad	dress					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 GFR 1.35(a). In no event, however, may a reply be timely filed after SIX (6) MONTH'S from the mailing date of this communication.  If NO period for reply is specified above, the macround statutory principle within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is specified above, the macround statutory principle will expire SIX (6) MONTH'S from the mailing date of his communication.  Failure to reply within the set or extended period for reply valled, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any carried patent term adjustment. See 37 CFR 1.704(b).									
Responsive to communication(s) filed on	<b></b> ·								
2a)☐ This action is <b>FINAL</b> . 2b)☒ This	action is non-final.								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims									
4) ☐ Claim(s) 1-6 is/are pending in the application.  4a) Of the above claim(s) is/are withdra  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) is/are rejected.  7) ☐ Claim(s) 1-6 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/are									
Application Papers									
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheel(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. §§ 119 and 120									
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) □ Some * c) □ None of:  1.□ Certified copies of the priority documents have been received.  2.□ Certified copies of the priority documents have been received in Application No. 09/524,725.  3.□ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13)□ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) □ The translation of the foreign language provisional application has been received.  14)□ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.									
Attachment(s)  1) Notice of References Cited (PTO-892)			TO-413) Paper No						
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Noti	ce of Informal Pate	nt Application (PT						

Application/Control Number: 10/603,823 Page 2

Art Unit: 2823

## DETAILED ACTION

 The disclosure is objected to because of the following informalities: need updating "CROSS RELATED APPLICATION DATA" since 09/524,725 has been issued as US 6.614.053.

## Claim Objections

2. Claims 1-6 are objected to because of the following informalities: lacking antecedent basis, i.e. the interlayer insulating film in claims 1 (line 14), claim 2 (line 16), claim 3 (line 18), claim 4 (line 13), claim 5 (line 10) and claim 6 (line 12); "the scanning line" (claim 6, line 6); and "the data line (claim 6. lines 7-8). Appropriate correction is required.

## Allowable Subject Matter

- Claims 1-6 would be allowable if rewritten or amended to overcome the objection as set forth in this Office action.
- 4. The following is a statement of reasons for the indication of allowable subject matter:
  The prior art of record, Nishimura et al. to US 6,462,802, teaches a method of producing an active matrix substrate, comprising:
  - forming a semiconductor film 401 used to form the TFT, and then forming a gate insulating film 106 used to form the TFT (Fig.4A);
  - forming a conductive film 107 used to form a gate electrode of the TFT transistor and then patterning the conductive film 107 so as to form the gate electrode (Fig. 4B);
  - selectively introducing an impurity into the semiconductor film 401 to form source and drain regions 109 of the TFT (Fig.4E);

Application/Control Number: 10/603,823

Art Unit: 2823

 forming an interlayer insulating film 110 in a layer on the surface of the gate electrode (Fig. 8);

forming a contact hole, for connection to the TFT, in the interlayer insulating film
 110.

In contrast, Nishimura et al. neither teach or suggest simultaneously forming the semiconductor film for film quality evaluation in a region to be used as the quality evaluation region; simultaneously forming a gate insulating film in the region to be used as the film quality evaluation region; simultaneously removing the conductive film from the film quality evaluation region, simultaneously introducing the impurity also into the semiconductor film for film quality evaluation via the gate insulating film in the evaluation region; simultaneously forming the interlayer insulating film in the evaluation region, in a layer on the surface of the gate insulating film in the evaluation region, in the film quality evaluation region, the opening in the interlayer insulating film in the evaluation region and in the gate insulating film in the evaluation region.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hsien-Ming Lee whose telephone number is 703-305-7341. The examiner can normally be reached on M-F (9:00 ~ 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Application/Control Number: 10/603,823

Art Unit: 2823

Hsien-Ming Lee Examiner Art Unit 2823

Nov. 30, 2003